WHAT IS CLAIMED:

1. A method of forming a sweep elbow fitting having a bend portion and two straight portions, the method comprising the steps of:

inserting a first segmented mold core, having a plurality of segments, including a first segment and a second segment, the mold core having a bend portion and a straight portion, into a mold cavity;

inserting a second similar segmented mold core, having a plurality of segments, including a third segment and a fourth segment, the mold core having a bend portion and a straight portion, into the mold cavity;

injecting a molten polymer into the mold cavity;

allowing the molten polymer to, at least partially, set;

linearly retracting the first segment of the mold core from the mold cavity in a first direction;

translating the first mold core in a direction generally normal to the first direction of linear retraction ;

linearly retracting the second segment;

linearly retracting the third segment of the mold core from the mold cavity in a second direction;

translating the second mold core in a direction generally normal to the second direction of linear retraction ; and

linearly retracting the second segment.

2. The method of claim 1 further comprising the step of selecting the segmented mold core and the similar mold core such that each have only two segments.

3. The method of claim 1, further comprising the step of selecting segments such that the first and second segments share opposed surfaces and the third and fourth segments share opposed surfaces and further comprise alignment guides on the opposed surfaces.

4. The method of claim 1, further comprising the step of injecting perfluoroalkoxy as the molten polymer.

5. A method of forming a curved fluid passageway in a plumbing fitting, the method comprising the steps of:

inserting a segmented mold core, having a first segment and a second segment, the mold core having a bend portion and a straight portion, into a mold cavity, the first segment and the second segment each comprising about half of a cylinder and the first segment further comprising a greater curvature of a bend and the second segment further comprising a lesser curvature of the bend and the first segment and the second segment sharing an axially extending interface;

injecting a fluid polymer into the mold cavity;

allowing the fluid polymer to at least partially set;

linearly retracting the first segment of the mold core from the mold cavity;

translating the mold core in a direction generally normal to the direction of the linear retraction; and

linearly retracting the second segment from the mold core.

6. The method of claim 5, further comprising the step of injecting perfluoroalkoxy as the fluid polymer.

7. A mold core for forming a curved fluid passage in a fluid flow fitting, the mold core comprising;

two segments, each segment having a bend portion and a straight portion and the two segments forming together a miter at an end thereof,

the two segments being linearly retractable independently of each other and the mold core being movable translationally in a direction substantially normal to a- direction of the linear retraction, and the mold core being capable of insertion into and retraction from a mold cavity.

8. The mold core of claim 7, comprising a first segment and a second segment, the first segment comprising an outside sweep core and the second segment comprising an inside sweep core.

9. The mold core of claim 7, each segment thereof having at least one face in slidable opposition to at least one face of at least one other segment, the faces having alignment guides to maintain relative alignment thereof.

10. The mold core of claim 9, in which the alignment guides comprise a boss on a first face and an interlocking groove on a second face.

11. A molded fluoropolymer sweep fluid flow fitting having straight, internally generally cylindrical, elongate ends and flat drafts defined in a lumen thereof..

12. The molded fitting of claim 11, in which the flat drafts comprise opposed flattened portions on interior walls of the fitting, the flattened portions having a greatest width located in the vicinity of a bend portion of the fitting and tapering a way from the bend portion.

13. The fluid flow fitting of claim 11, in which the fluoropolymer comprises perfluoroalkoxy.

14. The fluid flow fitting of claim 11, in which the fitting is selected from the group consisting of a sweep elbow, a sweep T, a sweep U, a trap and a sweep Y.